Originating Committee: Budgets and Contracts Committee (BCC)



Issue Manager Team & Authors: Chris Sutton, Steve Anderson, Tom Galioto, Denise Jones,

Tom Sicilia, Dan Solitz, Maxwell Woods, Miya Burke, Jeff Wyatt, Tim Kovis

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Letter Heading:

To: Brian Vance (DOE)

David Bowen (WA State Dept. of Ecology)

Dave Einan (EPA)

Subject: Fiscal Year 2025 Hanford Cleanup Priorities

Advice Summary:

The Hanford Advisory Board's (HAB's or Board's) primary mission is to provide informed and actionable recommendations and advice to the U.S. Department of Energy (DOE), the Washington State Department of Ecology, and the U.S. Environmental Protection Agency (EPA), collectively known as the Tri-Party Agencies. The Board advises the Tri-Party Agreement (TPA) agencies to prioritize the following critical activities for fiscal year (FY) 2025. These items are summarized below and presented in more detail in a table in this letter.

- Optimize operations to substantially progress toward nominal design capacity of low activity tank waste vitrification in the Direct-Feed Low-Activity Waste (DFLAW) plant.
- Implement the plan to address known and future underground storage tank leaks.
- Design and construct the high-level waste treatment plant.
- Transfer the highly radioactive cesium and strontium capsules to dry storage.
- Demolish the K-West spent fuel basin.
- Optimize groundwater treatment and reduce source contamination to prevent contamination from reaching the Columbia River over the life of the project.
- Ensure that all appropriate actions are taken to allow for timely offsite disposal of waste.
- Complete remediation of the highly radioactive spill at the 324 Building.
- Initiate characterization of waste sites on the Central Plateau to accelerate development of Remedial Investigation/Feasibility Study (RI/FS) documents.
- Initiate remediation of certain waste sites on the Central Plateau consistent with Remedial Action Work Plans (RAWP).
- Develop and implement a plan for maintaining a qualified workforce as experienced workers retire and the workload increases.
- Present a project execution plan with a flat funding scenario in addition to a compliant scenario required by the TPA milestones.
- Include this Advice with the upcoming FY2025 DOE Hanford budget request to be submitted to DOE Headquarters.

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Background:

This Advice utilizes DOE's most recently available Hanford Site 5-Year Plan (Reference 1) as a guide as well as DOE's presentation of the 5-Year Plan to the public on October 20, 2022 (Reference 2). Two general categories of activities used in References 1 and 2 are also used in this Advice. Those categories are:

- Tank Waste Treatment
- Risk Reduction

Additionally, categories of "Accelerated Cleanup" and "Indirect/Supporting Activities" have been provided.

In this advice, the Board only prioritizes specific critical activities within each of these four areas. Critical activities are those activities that the Board believes must be funded in FY2025 to assure completion, to meet milestones as scheduled (whether that completion is scheduled in FY2025 or in a following FY), or to accelerate the currently planned completion date.

This advice includes an additional category of cleanup activities the Board believes are critical to be initiated in FY2025 in order to accelerate the cleanup schedule. The Board recognizes that initiation of these activities may require additional appropriations. However, by prioritizing them in this advice to be included in the 2025 budget cycle, the concerns of the public regarding the duration of cleanup at Hanford are emphasized to DOE Headquarters and to Congress.

In past years, the Board has prioritized some activities as important (Reference 3). The Board has discontinued that practice in this Advice but recognizes that numerous activities are important to the cleanup at Hanford, including many not specifically indicated in DOE's 5-year plans. Important activities are those that should be undertaken within available funding. The TPA agencies should prioritize these other important activities based upon the availability of funding as well as upon unforeseen circumstances (such as those related to Covid-19).

In January 2022, DOE published the 2022 Hanford Lifecycle Scope, Schedule and Cost Report (Reference 4). This report indicated that cleanup at Hanford (excluding Long Term Stewardship) could generally be completed by 2078 at a cost of between \$293.2 billion (low range estimate) and \$633.6 billion (high range estimate). The Board is deeply concerned about whether such funding will be available and whether a sufficient workforce will be available over the next 50+ years to meet the 2078 completion schedule. The Board believes that it is imperative to significantly shorten the duration for completion of cleanup activities, thereby reducing overall costs, risks to both Hanford workers and the public, and liabilities for DOE.

In addition to the HAB and its constituent organizations, numerous local, regional, and national entities are deeply concerned about whether such funding will be available and whether a sufficient workforce will be available over the next 50+ years to meet the completion schedule. For example, formal letters requesting increased Hanford cleanup funding have been issued recently to President

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Biden, to the Office of Management and Budgets (OMB) Director, and to the Oregon congressional delegation (Reference 5). These letters were issued by over 25 signatories representing a broad range of local and regional community and state organizations, the U.S. congressional delegation from WA state, and several state/national/federal organizations. It is noteworthy that these letters were not issued on behalf of nor at the request of the HAB but were issued independently by their sponsoring organizations.

Lastly, the Board believes that it is imperative that DOE, in coordination with the EPA and the Washington State Department of Ecology, engage DOE-EM in formal discussions on the critical need for substantial increases in Hanford funding for the next 10 years, and the attendant fiscal and environmental risks to DOE and to the public of not receiving those funding increases.

Advice:

The table below summarizes the Board's recommended cleanup priorities for FY2025. Note that activities in the 5-year plan identified to be completed prior to FY2025 are not listed in this table, but if they are not completed prior to FY2025 they should roll over into the FY2025 list.

The Board recognizes the importance of assuring the safe, secure, and compliant management of Hanford's critical resources and the maintenance of infrastructure, safeguards, and security. Also, the Board believes that it is imperative that DOE continue to prioritize and implement Hanford worker and public safety practices. A healthy workforce and safe and environmentally conscious performance of work are fundamental core values of the Board (Reference 6). These activities require a significant commitment of both funding and labor to accomplish every year, and thus, are not addressed specifically in the table below.

The Board requests a point-by-point response to the advice described in the table below from each of the TPA agencies.

FY2025 Recommended Cleanup Priorities

NOTE 1: Acronyms utilized in the table below are shown at the end of the Table.

NOTE 2: The "Item" column in the table below is used as an identifier, and does not represent any order of priority

Item	FY2025 Cleanup Activity Description			
Tank Waste Cleanup				
TW-a	DFLAW: Operate DFLAW and optimize throughput to improve upon the projected three-year ramp-up to reach nominal full capacity levels of waste vitrification (21 metric tons of glass per day).			

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TW-b	Implement SST Leak Detection, Characterization, Mitigation, Cleanup, and Communication Plan (By August 25, 2023, per agreement with Ecology, DOE must prepare and submit a Leak Response Plan for the SST System): Implement and utilize this plan, including development of abatement technologies as described in HAB advice #313 (Reference 7), to address known SST tank leaks. Initiate retrieval activities for SSTs known to be leaking if that process is included in the above plan.			
TW-c	High Level Waste Facility: Resume design and construction activities necessary to meet TPA milestones for the WTP high-level waste facilities pre-treatment (TPA milestone D-00A-16 by 2033), hot startup (TPA milestone D-00A-17 by 2033), and initial plant operations (TPA milestone D-00A-01 by 2036).			
Risk Reduction				
RR-a	WESF: Initiate transfer of cesium and strontium capsules to dry capsule storage area.			
RR-b	K-West Basin: Initiate demolition of K West Basin.			
RR-c	Pump & Treat: Continue to maximize plume reduction through pump and treat optimization and source reduction activities both on the Central Plateau and along the River Corridor.			
RR-d	Offsite Waste Shipments: Identify and collect all data and resource needs to facilitate milestone waste shipments to WIPP or other appropriate offsite facilities.			
Accelerated Cleanup				
AC-a	Waste Characterization: Initiate/continue waste site characterization associated with certain adaptive milestones (OUs: 200-SW-2, 200-WA-1, 200-CW-3, 200-BC-1 for example) to accelerate submittal of RI/FS documents.			
AC-b	324 Building: Accelerate and complete excavation of waste site 300-296 beneath the 324 Building to ensure that milestone M-016-85A is completed during FY2025 and initiate deactivation of the 324 Building			
AC-c	Cribs: Begin 200-CW-5/PW 1,3,6 remedial activities, consistent with the schedule outlined in Revision 1 (2021) of the RAWP.			
Indirect/Supporting Activities				
ISA-a	Workforce Issues: The HAB has serious concerns that sufficient workforce personnel will be available in the future to complete or accelerate Hanford cleanup by 2078. Therefore, the Board advises DOE to develop and implement a long-term plan that describes what specific actions DOE will take to assure workforce availability through 2078.			

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ISA-b	Hanford Funding Support: The Board advises DOE to develop a flat-funding scenario (approximately \$3 billion per year) in the next Lifecycle Report that defines how that assumption will impact cost, schedule, and scope of the Hanford mission.	
ISA-c	Advice Distribution: The Board advises the TPA agencies to include this Advice with t upcoming FY2025 DOE Hanford budget request to be submitted to DOE Headquarters	

Acronyms used in the above Table:

DFLAW	Direct-Feed Low-Activity Waste	SST	Single Shell Tank
DOE	US Department of Energy	TPA	Tri-Party Agreement
EM	Environmental Management (DOE)	TSCR	Tank-Side Cesium Removal
FY	Fiscal Year	WESF	Waste Encapsulation and Storage
OU	Operable Unit		Facility
RAWP	Remedial Action Work Plan	WIPP	Waste Isolation Pilot Plant
RI/FS	Remedial Investigation/Feasibility	WTP	Waste Treatment Plant
	Study		

References:

1. Hanford Site 5 Year Plan, 2023-2027, dated September 27, 2022.

Link: https://www.hanford.gov/flipbook/Hanford%20Site%205-Year-Plan/#

2. DOE Presentation of 5 Year Plan, dated October 20, 2022.

Link: www.hanford.gov/files.cfm/UPDATED_Hanford_5-Year_Plan_21102022_gy.pdf

- 3. Hanford Advisory Board Consensus Advice #312, "FY2024 Hanford Cleanup Priorities", dated March 24, 2022.
 - Link: https://www.hanford.gov/files.cfm/NA_(HAB)-312_-_Letter.pdf
- 4. 2022 Hanford Lifecycle Scope, Schedule and Cost Report, dated January 2022.

Link: https://www.hanford.gov/files.cfm/2022 LCR DOE-RL-2021-47 12-27.pdf

- 5. Letter, David Reeploeg (TRIDEC Vice President for Federal Programs) to Susan Coleman (Chair, Hanford Advisory Board), "Transmittal of Community Letters Supporting Adequate Hanford Funding," dated February 24, 2023.
 - Link: https://pdw.hanford.gov/document/AR-23819
- 6. Hanford Advisory Board Values.
 - Link: https://www.hanford.gov/files.cfm/HAB ValuesWhitePaper Attach.pdf
- 7. Hanford Advisory Board Consensus Advice #313, "Responding to Leaking High-Level Radioactive Waste Tanks", dated March 24, 2022
 - Link: https://www.hanford.gov/files.cfm/NA_(HAB)-313_-_Letter.pdf

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